This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 and 2 (cancelled)

3. (new) A method for identifying a swine that is resistant to intestinal colonization by *E. coli* that are capable of binding the ECF18R in swine, said method comprising:

(a) determining whether a genetic polymorphism, wherein a nitrogen base at position 307 in the open reading frame of the alpha (1, 2) fucosyltransferase 1 gene (FUT1) of the swine is adenine, or a polymorphism in linkage disequilibrium with the FUT1 polymorphism that has only adenine at position 307, is in the swine; and

(b) inferring that the swine is resistant if the swine only has adenine at position 307 or is homozygous for a polymorphism in linkage disequilibrium with FUT1 adenine in position 307.

4. (new) A method for identifying a swine that is resistant to intestinal disorders caused by a microorganism capable of binding to ECF18R in swine, said method comprising:

(a) determining whether the only nitrogen base at position 307 in the open reading frame of the alpha (1, 2) fucosyltransferase 1 gene of the swine is adenine; and

(b) identifying the swine as resistant if the only nitrogen base at position 307 of the open reading frame of FUT1 is adenine.

5. (new) A method for breeding swine that are resistant to diseases caused by *E. coli* capable of binding to the ECF18R in swine, said method comprising:

(a) selecting for breeding swine that are homozygous for a genetic polymorphism in the open reading frame of the alpha (1, 2) fucosyltransferase 1 gene, wherein a nitrogen base at position 307 in the open reading frame of the alpha (1, 2) fucosyltransferase 1 gene of the swine is adenine, or for a polymorphism in linkage disequilibrium with the FUT1 polymorphism that has adenine at position 307; and

(b) breeding the selected swine.

6. (new) The method of claim 5 wherein the *E. coli* is strain F18.